

## METHOD AND APPARATUS FOR PERFORMING FAST POWER CONTROL IN A MOBILE COMMUNICATION SYSTEM

### ABSTRACT

A method and apparatus for controlling transmission power levels in a mobile communication system. The method provides for a closed-loop power control method. A mobile station provides information on the quality of the signal received from the base station, and the base station responds by adjusting the power allocated to that user in a shared base station signal. The transmission power is adjusted initially by a large increment and then ramped down at an increasingly decreasing rate. The mobile station also provides information to the base station as to its relative velocity and the base station adjusts its transmission power in accordance with this velocity information.